Solving by Substitution p.28-29

Which variable is the easiest to ISOLATE?

p.28

$$x = 2y - 6$$

Solution:
$$(20, 13)$$

3x - 4v = 8

$$3x - 4y = 8$$

$$3(-4y = 8) - 4y = 8$$

$$6y - 18 - 4y = 8$$

$$3(20)-4(13) = 8$$

 $(00-52=8)$
 $8=8$

$$X=2(13)-6$$

 $X=26-6$
 $X=20$

Your cell phone provider uses two different plans:

p.29

a.)One plan costs \$.20 per text plus \$45 monthly service charge.

(b.) The other plan costs \$.50 per text with no service charge.

Write a system of equations to represent the cost of the cell phone plans.



For how many texts will both plans cost the same?

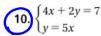
$$\begin{array}{r}
 .20x + 45 = .50x \\
 -.20x & -.20x \\
 \hline
 45 = .30x \\
 .30 & .30
 \end{array}$$

$$\begin{array}{r}
 45 = .30x \\
 .30 & .30
 \end{array}$$

If you send and receive about 500 text per month, which plan should you use?

Assignment p. 146 #10 -18 evens.

Solve each system by substitution. Check your answers.



13.
$$\begin{cases} 4p + 2q = 8 \\ q = 2p + 1 \end{cases}$$

16.
$$\begin{cases} t = 2r + 3 \\ 5r - 4t = 6 \end{cases}$$

11.
$$\begin{cases} 3c + 2d = 2 \\ d = 4 \end{cases}$$

13.
$$\begin{cases} 4p + 2q = 8 \\ q = 2p + 1 \end{cases}$$
14.
$$\begin{cases} x + 3y = 7 \\ 2x - 4y = 24 \end{cases}$$
16.
$$\begin{cases} t = 2r + 3 \\ 5r - 4t = 6 \end{cases}$$
17.
$$\begin{cases} y = 2x - 1 \\ 3x - y = -1 \end{cases}$$

17.
$$\begin{cases} y = 2x - 1 \\ 3x - y = -1 \end{cases}$$

12.
$$\begin{cases} x + 12y = 68 \\ x = 8y - 12 \end{cases}$$

15.
$$\begin{cases} x + 6y = 2 \\ 5x + 4y = 36 \end{cases}$$

18.
$$\begin{cases} r + s = -12 \\ 4r - 6s = 12 \end{cases}$$